

[54] OPTICAL PROXIMITY DETECTOR

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[58] Field of Search 102/213

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[57] ABSTRACT

Method and apparatus for optically detecting an object within close proximity to a structure surface, e.g., the nose of a torpedo or claw of a robotic arm, and generating a responsive control or command signal. A cone of light is emitted from the structure surface to illuminate any object coming within its field. Light reflected from that object to a receiver is processed to generate a responsive first electrical signal. This first signal is further processed to generate a second signal, control or a command signal, only after the first signal has decreased to around 30% of its peak level indicating that the object has closed to within a predetermined distance to the structure surface.

11 Claims, 4 Drawing Sheets

